

NOTES ON THE OCCURRENCE OF SOME PLANTS OF WEST BENGAL¹

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During the course of intensive botanical collections in Jalpaiguri district of West Bengal and consultations at Central National Herbarium (CAL) and Herbarium of the Industrial Section, Indian Museum (BSIS), I studied the following plants which are interesting in respect of their occurrence in West Bengal. In addition to previous communications on the distribution of some plants in Jalpaiguri district as well as in West Bengal, notes on the occurrence of twelve more taxa in Jalpaiguri and Darjeeling districts and other parts of West Bengal are given here with their correct nomenclature.

BALSAMINACEAE

Impatiens decipiens Hook. f. in Rec. Bot. Surv. India 4: 17 & 22. 1905; Hara, Fl. East. Himal. 195. 1966.

Flowering & fruiting: June to October.

Specimens examined: West Bengal: Darjeeling district — Pomong, \pm 850 m (Acc. No. 71392), (CAL).

Distributional note: This plant has so far been known only from the type localities—Sikkim and Chumbi (J. D. Hooker, 1905) and South Tibet.

I. gamblei Hook f. in Rec. Bot. Surv. India 4: 15 & 20. 1905.

Flowering & fruiting: May to October.

Specimens examined: West Bengal: Darjeeling district — between Sandakphu and Phallut, \pm 4000 m, 19 Oct. 1904, *Burkill* 25229 (CAL); Birch Hill, \pm 2200 m, 11 May, 1940, *K. Biswas* 4833 (CAL).

Distributional note: This species was previously recorded from Sikkim and Chumbi only by J. D. Hooker (1905).

I. gammiei Hook f. in Rec. Bot. Surv. India 4: 16 & 21. 1905.

Flowering & fruiting: September to October.

Specimens examined: West Bengal: Darjeeling district — South of Subarkum, \pm 4000 m, 1 Oct. 1906, *Burkill* 27688 (2-gatherings) (CAL); 5 miles north of Sandakphu, \pm 4000 m, 28 Sept. 1906, *Burkill* 27619 (CAL).

Distributional note: This taxon was previously known to occur in Sikkim and Arunachal Pradesh in India.

I. wallichii Hook. f. in Rec. Bot. Surv. India 4: 15 & 20. 1905; Hara in Ohashi, Fl. East. Himal. 3rd Rep. (Bull. No. 8): 79. 1975.

Flowering & fruiting: July to October.

Specimens examined: West Bengal: Darjeeling district — Tongloo, \pm 3000 m, 3 Aug. 1862, without Collector's name & number (CAL); Phullalong, \pm 3000 m, 5 Oct. 1870, without Collector's name, 12688 (CAL); Sandakphu, \pm 4000 m, Sept. 1880, *J. S. Gamble* 8423 (CAL); Sandakphu west, \pm 1200 m, 16 Sept. 1962, *B. Safui* 1703 (CAL).

Distributional note: It was recorded so far from Sikkim and Nepal by Hooker (1905) and Hara (1975). Of the above cited speci-

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mens, the specimens from Tongloo and Phulla-long have Hooker's signature on the sheets. As Hooker (1905) mentioned Sikkim as one of the localities, it is presumed that the specimens studied by Hooker himself as evidenced from his signature are from Darjeeling district. Hence the present record of the species from West Bengal is an additional locality.

COMPOSITAE

Lactuca dolichophylla Kitamura in Res. Kyoto Univ. Sci. Exped. Karak. & Hinduk. 1955, viii. (Addit. & Corr. Fl. Afghan.) 150, March 1, 1966 et in Hara, Fl. East. Himal. 341. 1966. *Mulgedium sagittatum* Royle, Ill. Bot. Himal. 252, t. 61, f. 2. 1835, not *Lactuca sagittata* Wald. et Kit. (1802). *Lactuca longifolia* DC. Prodr. 7: 135. 1835; Clarke, Comp. Ind. 264. 1876; Hook. f., Fl. Brit. Ind. 3: 405. 1881.

Flowering & fruiting: September to October.

Specimen examined: West Bengal: Jalpaiguri district — on way to Buxaduar, 850 m, Buxaduar forest range, rare in open rocky hill slopes, 15 Sept. 1976, J. K. Sikdar 7825 (CAL)

Distributional note: It is known to occur in Kashmir, Himachal Pradesh and Uttar Pradesh in India and in Nepal, Afghanistan, Pakistan and W. China.

APOCYANACEAE

Anodendron paniculatum DC. Prodr. 8: 444. 1844; Hook. f., Fl. Brit. Ind. 3: 688. 1882; Prain, Bengal Plants 2: 504. 1903 (repr.); Haines, Bot. Bihar & Orissa 2: 572. 1922 (repr.); Das in Kanjilal & Das, Fl. Assam 3: 270. 1939.

Flowering: February to May.

Fruiting: January.

Specimen examined: West Bengal: Jalpaiguri district — around Poro forest bungalow,

Nimati forest range, 2 Apr. 1973, Bijoy Krishna 464 (BSIS).

Distributional note: It is distributed in Bangladesh, Burma, Sri Lanka, Malaya Peninsula, Malesian Islands, Philippines and in India known to occur in Arunachal Pradesh, Assam, Mizoram, Bihar, Orissa, Maharashtra, Karnataka, Kerala and Andaman & Nicobar Islands. Prain (1903) recorded this species from Chittagong (Bangladesh).

SCROPHULARIACEAE

Lindenbergia hookeri Clarke ex Hook. f., Fl. Brit. Ind. 4: 261. 1884; Das in Kanjilal & Das, Fl. Assam 3: 378. 1939; Prijanto in Reinwardtia 7: 555. 1969; Yamazaki in Ohashi, Fl. East. Himal. 3rd Rep. (Bull. No. 8): 98. 1975.

Flowering & fruiting: February to May.

Specimens examined: West Bengal: Jalpaiguri district — on way to Buxaduar, 650 m, Buxaduar forest range, rare along the valleys and rocky situations on the lower hills, 28 Feb. 1934, K. Biswas 1755 (CAL); Bengal & borders-without precise locality and date of collections, V. Narayanswami & Party 2589 (2-gatherings) (CAL).

Distributional note: It was recorded so far from Assam, Meghalaya, Sikkim and Bhutan.

L. macrostachya (Benth.) Benth. Scroph. Ind. 22. 1835; Hook. f., Fl. Brit. Ind. 4: 262. 1884; Prinjanto in Reinwardtia 7: 554. 1969; G. Raizada in Ind. Jour. For. 1(2): 153. 1978. *Stemodia macrostachya* Benth. (in Wallich, Cat. 3925. 1831, nomen) Bot. Reg. 17: t. 1470. 1832.

Flowering & fruiting: March to May.

Specimen examined: West Bengal: Herb. Griffith 3883/1 (Acc. No. 321664) (Distributed at the Royal Botanic gardens, Kew, 1862-3), (CAL). Generally grows along valleys,

river banks, rocky places and in roadside wastelands.

Distributional note: It occurs in Nepal, West Pakistan, Siam, China and Kashmir, Punjab, Uttar Pradesh, Bihar, Himachal Pradesh in India. A single earlier collection by Griffith from West Bengal is thus mentioned here as a new distributional record of the species from the state.

Hooker (1884) pointed out that this species is "perhaps only a variety of *L. philippensis* (Cham.) Benth. but more glabrous, with shorter petioles". Usually, *L. macrostachya* (Benth.) Benth. is often confused in its general morphology with *L. philippensis* (Cham.) Benth. It is distinguished by lax interrupted inflorescence with smaller flowers, triangular calyx lobes with acute tips, \pm triangular posterior lip of corolla, comparatively shorter corolla tube and glabrous ovary and style base.

ACANTHACEAE

Dianthera virgata (Wall. ex Nees) C. B. Clarke in Hook. f., Fl. Brit. Ind. 4: 542. 1885. *Leptostachya virgata* Wall. ex Nees in Pl. Asiat. Rar. 3: 105. 1832. *Justicia virgata* Wall. (Cat. 7177) ex T. Anders. in Journ. Linn. Soc. 9: 516. 1867. *Dianthera virgata* Benth. in Gen. Pl. 2: 1114. 1873; Thothathri in Rec. Bot. Surv. Ind. 20(2): 163. 1973.

Flowering & fruiting: November.

Specimens examined: West Bengal: Jalpaiguri district — Lapchakhawa, \pm 1200 m, Buxaduar forest range, rare in shady moist situations on the hill slopes, 27 Nov. 1975, J. K. Sikdar 972 (CAL).

Distributional note: This species has so far been known only from Manipur, Arunachal Pradesh, Meghalaya, Sikkim in India and Bhutan and Burma. The present collection of the species after a lapse of more than 100

years from Jalpaiguri district shows its extended distribution in Eastern India and is being recorded here from West Bengal for the first time.

VERBENACEAE

Clerodendrum philippinum Schauer, DC. Prodr. 11:667. 1847. ('Clerodendron'); Howard and Powell, Taxon 17: 54. 1968. *Volkameria japonica* Jacq. Hort. Schoenbr. 3: 48, t. 338. 1798. *Clerodendron fragrans* Hort. ex Vent. Jard. Malm. 2: t. 70. 1804; C. B. Clarke in Hook. f., Fl. Brit. Ind. 4: 589. 1885; Prain, Bengal Plants 2: 624. 1903 (repr.).

Flowering: November to May.

Specimens examined: West Bengal: Jalpaiguri district — Chunabhati, \pm 1200 m, Buxaduar forest range, frequent in grassy areas along the rocky forest paths and here and there on the hill slopes, 28 Nov. 1975, J. K. Sikdar 995 (CAL); Buxaduar, \pm 1000 m, Buxaduar forest range, along the hillslopes, 29 Nov. 1975, J. K. Sikdar 4026 (CAL); Buxaduar to Chuna-bhati, \pm 1100 m, Buxaduar forest range, 12 May, 1976, J. K. Sikdar 4591 (CAL).

Distributional note: It is known to occur in Assam, Tripura, Meghalaya, Bihar, Delhi, Uttar Pradesh, Madhya Pradesh, Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu in India and in China, Japan, United States, Mexico, West Indies, Central America, Argentina, and Chile. This report of the species from West Bengal is a record of its naturalisation in the flora of Jalpaiguri district, as an escape.

POLYGONACEAE

Peraicaria tenella (Bl.) Hara in Jour. Jap. Bot. 44: 375. 1969; Fl. East. Himal. 23. 1971. *Polygonum tenellum* Bl., Bijdr. 530. 1825, non Roxb. 1832. var. *kawagoeana* (Makino) Hara in Jour. Jap. Bot. 375. 1969. *P. kawagoeana*

Makino in Bot. Mag. Tokyo 28: 115. 1914. *P. minus* Hudson (Fl. Angl. ed. 1, 148. 1762, *non vidi*) sensu Fl. Brit. Ind. 5: 36. 1886, p.p.; Prain, Bengal Plants 2: 663. 1903 (repr.). *P. minus* subsp. *micranthum* (Meisn.) Danser in Bull. Jard. Bot. Buitenz. Ser. 3, 8: 176, f. 8. 1927.

Flowering & fruiting: April to December.

Specimens examined: West Bengal: Jalpaiguri district — Balapara, Bholka forest range, rare in muddy situations towards the extreme eastern border of the district, 6 Dec. 1975, J. K. Sikdar 4163 (CAL).

Distributional note: This taxon was recorded from Assam, Meghalaya, Arunachal Pradesh, Manipur, Sikkim, Madhya Pradesh, Tamil Nadu in India and also from Nepal, Bhutan, Bangladesh, Burma, Malaysia, China, Japan and Europe. It was known from West Bengal from a single specimen in CAL, collected by Thornton Ripley from Kalimpong on 18.7.1914, which was cited by Danser (1927). A recent collection by K. Thothathri on 6.11.1960 (CAL) from Kalimpong approaches the present taxon, but on critical examination it was identified as *Persicaria tenella* (Bl.) Hara var. *kawagoeana* (Makino) Hara which was considered by Danser (1927) and Hara (1969, 1971). The present collection which is also identical with the Wallich's specimen (Wall. Cat. 1722) from Nepal after a lapse of about 65 years is thus interesting and establishes its occurrence in West Bengal.

URTICACEAE

Pilea peploides (Gaud.) Hook. & Arn., Bot. Beech. Voy. 96. 1832; Wedd. Ann. Sc. Nat. Ser. 4, 1: 187. 1854; J. D. Hooker in Hook. f., Fl. Brit. Ind. 5: 554. 1888. *Dubrueilia peploides* Gaud. in Freyc. Voy. Bot. Uran. 495. 1830.

Flowering & fruiting: February.

Specimens examined: West Bengal: Jalpaiguri district — Chilapata, Chilapata forest range, rare in marshy ground associated with *Floscopa scandens*, *Ranunculus scleratus*, *Chenopodium album* etc., 25 Feb. 1976, J. K. Sikdar 4310 (CAL).

Distributional note: In India this taxon occurs in Assam, Meghalaya, Sikkim, Himachal Pradesh and in Burma, Java and Japan. Based on the scrutiny of the specimens of this taxon in CAL, it appears that this plant has been collected again from West Bengal for the first time after a lapse of 72 years.

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